

03.01-02/02/94-01060



DEPARTMENT OF THE NAVY
ATLANTIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
1510 GILBERT ST
NORFOLK VA 23511-2699

TELEPHONE NO:

(804) 322-4818

IN REPLY REFER TO:

5090

1823:KHL:srw

CERTIFIED MAIL RETURN RECEIPT REQUESTED

FEB 02 1994

North Carolina Department of Environment,
Health, and Natural Resources
Attn: Mr. Patrick Watters
P.O. Box 27687
401 Oberlin Road
Raleigh, North Carolina 27611

Re: MCB Camp Lejeune; Response to NC DEHNR Comments on the
Draft RI/FS Project Plans for Operable Unit No. 7 (Sites
1, 28, & 30)

Dear Mr. Watters:

This letter addresses your comments on the above referenced
project. Navy/Marine Corps responses are attached.

Any questions concerning these responses should be directed to
Ms. Katherine Landman at (804) 322-4818.

Sincerely,

Louis Boucher

L. A. BOUCHER, P.E.
Head
Installation Restoration Section
(South)
Environmental Programs Branch
Environmental Quality Division
By direction of the Commander

Attachment

Copy to:
EPA Region IV (Ms. Gena Townsend)
MCB Camp Lejeune (Mr. Neal Paul)
Activity Admin Record File

ATTACHMENT A

Response to Comments Submitted by the
State of North Carolina DEHNR - Division of Solid Waste
Management
on the Draft RI/FS Project Plans for Sites 1, 28, and 30,
(Operable Unit No. 7), MCB Camp Lejeune, North Carolina
Comment Letter by Mr. Patrick Watters,
Received by Baker Environmental, Inc. via Fax on 10-8-93

Response to Specific Comments - Work Plan (Comments 1 through 29)

1. Six existing wells are present at Site 1. This change was made in the text.
2. This sentence was rewritten to state that wells 1GW3, 1GW4, and 1GW5 are downgradient of the site.
3. Figure 5-3 will be corrected in the text as Figure 2-3.
4. Six additional wells were not installed at the site. This statement was clarified.
5. Concentration units (ug/l) and groundwater flow direction were added to the Figure 2-4.

The mercury (1GW1) and zinc (1GW4) concentrations were added to Figure 2-4.
6. Lead and cadmium were not detected in all six samples. Further, monitoring wells 1GW1, 1GW2, and 1GW6 exhibited mercury concentrations above the NCWQS. These changes were made in the paragraph.
7. The surface water and sediment stations discussed in Section 2.2.5.4 are the same stations depicted on Figure 2-4.
8. The Hadnot Point Burn Dump pond (i.e., Orde Pond) was added to Figure 2-5.
9. The groundwater flow direction will be added to Figure 2-5.
10. Well 28GW4 will not serve as a site specific background well for the upcoming RI investigation. A new background well is proposed for this investigation.
11. Units of concentration (ug/l) will be added to Figure 2-6.
12. The term "fresh water pond" also refers to Orde Pond.

Attachment

13. The two streams that comprise the headwaters of French Creek are west of Site 30 instead of east as stated in the text. This change was made.
14. The word mammals was replaced with the word animals.
15. The information presented in the sentence is correct. Site groundwater and soils data will be used to help assess the human health and ecological risks and determine the impacts on the surface water/sediment quality.
16. The word mammals was replaced with the word animals.
17. The correct term, "FTSA", will replace "HPIA" in the paragraph.
18. The word "augered" will replace "angered" throughout the text.
19. There are a total of six existing wells at Site 1 which were installed in 1984. Well 1GW5, however, is damaged and will not be sampled. Two of the unknown wells will be sampled. Accordingly, a total of seven wells will be sampled during this RI.
20. Two surface water/sediment samples were collected directly west of Site 1 during the investigation at Operable Unit 1 which was conducted in May 1993. These results will be used to characterize Cogdels Creek in the vicinity of Site 1 for this RI.
21. Trenching will be performed if the waste material is encountered during drilling and if the material is less than five feet from ground surface.
22. There are four existing wells at Site 28 (28GW1 through 28GW4) not three. This change was made in the text.
23. Proposed shallow well 28GW6 will be added to Figure 5-4.
24. Proposed deep well 28GW7D will be added to Figure 5-4.

Deep wells 28GW7D and 28GW8D will be installed to evaluate the vertical extent of contamination within the two burn dump areas and well 28GW9D will be used to evaluate background conditions. These changes will be made in the text.
25. Well 1GW1 will be replaced by well 28GW1 in the text.
26. Section 5.4.1.4 and Figure 5-5 will be revised to indicate that a total of 14 surface water/sediment stations will be sampled.
27. Section 5.4.3.2 and Figure 5-6 will be revised to indicate that a total of five borings will be advanced for background samples.

28. The use of only one well downgradient is justified since past groundwater sampling events have not revealed evidence of contamination on site or in the existing downgradient well.
29. A discussion of the surface water/sediment investigation at Site 30 will be added.

Response to Specific Comments - FSAP (Comments 30 through 38)

30. Section 3.0 figures will be included in Draft Final FSAP.
31. Table 2-1 in the FSAP will be revised to be consistent with Table 4-1 of the Work Plan.
32. The actual number of borings should be four as stated in the FSAP. This change will be made in the Work Plan.
33. The actual number of borings should be 18 as stated in the FSAP. This change will be made in the Work Plan.

The actual number of borings should be 5 as stated in the FSAP. This change will be made in the Work Plan.

The actual number of borings should be 8 and 10 as stated in the FSAP. This change will be made in the Work Plan.

34. The description of the sampling schemes for the two areas were combined in the Work Plan to match the FSAP.

The statement will be rewritten to read "exploratory test borings may be used" in both documents.

The actual number of borings to be used to confirm the thickness of the fill material is three as stated in the FSAP. This change will be in the Work Plan.

The actual number of borings for these disposal areas is 19 as stated in the FSAP. This change will be made in the Work Plan.

The actual number of background borings is five as stated in the FSAP. This change will be made in the Work Plan.

The actual number of borings for engineering parameters is two as stated in the FSAP. This change will be made in the Work Plan.

35. Groundwater samples will be collected from five of the six existing 1984 wells and two of the unknown wells for a total of seven wells. These changes will be made in both documents.

36. Engineering parameters will be sampled from deep well 28GW7D and shallow well 28GW1. This change will be made in the Work Plan.
37. The actual number of surface water/sediment stations to be sampled in Cogdels Creek is seven. These changes will be made in both documents.
38. The verbiage will be revised to state "may" instead of "will".

The actual number of borings to assess the thickness of the fill material is four as stated in the FSAP. This change will be made in the Work Plan.

Response to Specific Comments - HASP (Comments 1 through 5)

1. The combustible monitoring on Page 5-2 is in Section 5.2 and titled Point Source Monitoring. As stated in Section 5.2, point source monitoring refers to air monitoring performed at the source of the sampling/investigative activity. Sampling/investigative activity refers to the various site work areas. This is designed to have air monitoring conducted in all areas of potential concern and not just breathing zone areas.
2. This radiation meter has two separate probes. The external probe is the Scintillator tube which has a setting for milliroentgen (m/R) per hour scale. This probe is used for higher energy gamma sources. Whereas, the GM Pancake internal probe is a different probe used with a separate setting on the instrument. The internal probe measures beta and lower energy gamma and registers as counts per minute.
3. The remaining portion of Section 7.0 - Safe Boat Operations has been inserted with the HASP revision.
4. Based on Baker's previous work experience when conducting the types of work tasks for this project, the low concentration from previous analytical results, the limited amount of time individuals are actually in situations where volatilization can occur, rapid dispersion of vaporization from a contaminant occurs rapidly in the outdoors, Baker is more concerned with a skin contact exposure than an inhalation exposure. Baker's previous experience performing this type of work is that occasional point source air monitoring readings are obtained, however, breathing zone readings remain at background. Based on the conservative air monitoring results that would trigger protection upgrades or work stoppage, Baker's protection levels are adequate.
5. The revised HASP states that "if vinyl chloride is detected in the breathing zone with Drager tubes, work will stop, the Project Health and Safety Officer will then be consulted.

6. Based on previous analytical results, the site history, and work tasks planned, Baker anticipates that the required personal protection levels and work stoppage situations presented in Section 5.1 are adequate.